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Robert A. Boger

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EXAMINER

CHOW, JEFFREY J

ART UNIT

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/786,264	<b>Applicant(s)</b> BOGER, ROBERT A.	
	<b>Examiner</b> Jeffrey J. Chow	<b>Art Unit</b> 2628	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 20 November 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-30,32-37,39,41,43 and 45-55 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-30,32-37,39,41,43 and 45-55 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 28 September 2008 has been entered.

### ***Response to Arguments***

Applicant's arguments with respect to claims 1 – 30, 32 – 37, 39, 41, 43, and 45 – 51, filed 29 September 2008, have been considered but are not persuasive.

In response to applicant's argument that the examiner has combined an excessive number of references, reliance on a large number of references in a rejection does not, without more, weigh against the obviousness of the claimed invention. See *In re Gorman*, 933 F.2d 982, 18 USPQ2d 1885 (Fed. Cir. 1991).

Applicant argues the inherency statements relied on for Fredereick et al. (US 6,314,479) are improper under MEPE 2112 (pages 17 and 18). The inherency statements are “it is inherent that Frederick has a processor because computer has a processor and because Frederick process information in and out of the computer”, “it is inherent that Frederick has a memory because computer has a memory, either being hard drive, RAM, and/or, cache and because a processor needs memory to store input and output-type data to be able to process data”, “it is inherent that Frederick has a display controller as the PC 14 and display 12 support two different viewing

modes where one mode is configured for displaying PC graphics and the other mode is configured for displaying TV video” and “it is inherent that Frederick has a screen because it is inherent that a display apparatus has a screen”. The claim recites a generic processor.

Every computer system (i.e. computers, cell phones, digital electronic devices, etc) has a processor where information is processed. In a high level perspective, “processors” are seen to be modern processors, microcontrollers, chips, etc. In a low level perspective, “processors” are seen to be P-flops, N-flops, ALU’s, AND-gates, OR-gates, etc. If applicant maintains that not all computers have a processor to disprove the said inherency statement, then an example of one computer not having a processor but is still considered a computer should be given. The claim recites a generic memory.

Every computer has a processor and every processor needs memory to process information. If not information were stored, then a processor would not have anything to process. In a high level perspective, “memory” is seen to be hard drives, RAM, ROM, cache, etc. In a low level perspective, “memory” is seen to be flip-flops, signals in a wire, etc. If applicant maintains that not all computers have memory to disprove the said inherency statement, then an example of one computer not having memory but is still considered a computer should be given.

It is inherent that Frederick’s system has a display controller because the display system can display PC graphics and display TV videos. If a display controller is not in the display system, then the display system is not able to switch between two different video inputs, especially where one video input is an interlaced image and another video input is a noninterlaced image. If applicant maintains that Frederick does not have a display controller, an

example of how the display system can display PC graphics and display TV videos without the use of a display controller should be given.

Every display device has a screen. If a display device does not have a screen, there wouldn't be anything that can be displayed. If applicant maintains that not all display devices have a screen to disprove the said inherency statement, then an example of one display device not having screen but is still considered a display device should be given.

Applicant argues Frederick display device is not capable of controlling a television feature of the display apparatus from the host computer system when said screen is operating in said interlaced format, and for enabling an overlay window (page 18). Frederick discloses the user input from the display's front button panel and remote control is passed back to the PC 14 for the functionalities in Table 10 (column 13, lines 43 – 65) and only appropriate user controls that are supported by the display are presented to the user (column 11, lines 34 and 35), which implies whatever operations or commands are given for the display in either PC mode or TV mode, the operations or commands are passed through the PC. Frederick does not teach overlay windows, however Roskowski et al. (US 5,257, 348) and Ersoz et al. (US 5,287,189) are relied on to teach this feature as explained in the prior art rejections below.

Applicant argues the display screen of Frederick is not capable of both displaying interlaced images and displaying noninterlaced images (page 18). Frederick discloses the PC 14 and display 12 support two different viewing modes where one mode is configured for displaying PC graphics and the other mode is configured for displaying TV video (column 5, lines 33 – 35). Frederick clearly discloses a display cable of displaying interlaced images (TV video) and displaying noninterlaced images (PC graphics).

Applicant argues Roskowski does not disclose a second connector and a third connector as claimed. Roskowski discloses an A/D converter 15 (column 4, line 60 – column 5, line 11 and Figure 2) and a circuit 19 that translates interlaced video data into non-interlaced data and non-interlaced computer graphics data into interlaced data for presentation on output display monitors capable for displaying either interlaced data or non-interlaced data (column 6, lines 9 – 16 and Figure 2). It is clear that there is a second connector (input of circuit 19) and a third connector (output of circuit 19).

Applicant's arguments with respect to claims 1 – 30, 32 – 37, 39, 41, 43, and 45 – 51, filed 20 November 2008, have been considered but are not persuasive.

Applicant argues that the prior art does not disclose means for receiving a user input to switch a mode of operation from the interlace mode of operation to the noninterlaced mode of operation (pages 16 and 17). Frederick discloses an infrared sensor on the display 12 (column 5, lines 1 – 7) and a procedure for transitioning the display 12 from stand-alone mode to slave mode by sending an Operation Mode command to the display to switch to Slave mode, wherein this enables the PC to control the display (column 21, lines 25 – 32) and sending an Input Source Select command to switch the display to the P&D input, wherein this enables the PC to drive the video input of the display (column 21, lines 37 – 39).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 – 10, 12 – 25, 27 – 30, 32 – 37, and 46 – 55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Frederick et al. (US 6,314,479) in view of Roskowski et al. (US 5,257, 348) and Ersoz et al. (US 5,287,189) and Iwaki (US 6,567,097).

Regarding independent claim 13, Frederick teaches a computer system comprising a host computer (Figure 6: Host Computer 14) system including a processor (it is inherent that Frederick has a processor because computer has a processor and because Frederick process information in and out of the computer),

a memory coupled to said processor (it is inherent that Frederick has a memory because computer has a memory, either being hard drive, RAM, and/or, cache and because a processor needs memory to store input and output-type data to be able to process data),

a video controller coupled to said processor and said memory (column 5, lines 33 – 35: it is inherent that Frederick has a display controller as the PC 14 and display 12 support two different viewing modes where one mode is configured for displaying PC graphics and the other mode is configured for displaying TV video; column 5, lines 31 and 32: PC 14 drives the display 12 with a standard RGB or TMDS video signal),

means for receiving a user input (column 5, lines 1 – 7: an infrared sensor on the display 12) to switch a mode of operation from an interlace mode of operation to a noninterlaced mode of operation (column 21, lines 25 – 32: a procedure for transitioning the display 12 from stand-alone mode to slave mode by sending an Operation Mode command to the display to switch to Slave mode, wherein this enables the PC to control the display; column 21, lines 37 – 39:

sending an Input Source Select command to switch the display to the P&D input, wherein this enables the PC to drive the video input of the display).

Frederick did not expressly disclose a video capture circuitry configured, in response to receiving said user input switching to the noninterlaced mode, to convert the television compatible signal into a noninterlaced television output to be displayed in an overlay window while said visually detectable output from the host computer system is being displayed, however Frederick does disclose PIP functionality (column 16, lines 12 – 23). Roskowski discloses an A/D converter 15 (column 4, line 60 – column 5, line 11 and Figure 2) and a circuit 19 that translates interlaced video data into non-interlaced data and non-interlaced computer graphics data into interlaced data for presentation on output display monitors capable for displaying either interlaced data or non-interlaced data (column 6, lines 9 – 16 and Figure 2) and the viewing of television and computer graphics at the same time by allowing the display of television in one window and the display of computer graphics in another window overlaid and displayed at the same time in the same frame buffer (column 1, lines 11 – 16 and lines 18 – 30). Ersoz discloses a 4x3 video being overlaid on top of a 16x9 video (Figure 1c). It would have been obvious for one of ordinary skill in the art at the time of the invention to modify Frederick's system by, when in non-interlaced mode, converting an interlaced signal to a non-interlaced signal or a non-interlaced signal to an interlaced signal and outputting the converted interlaced signal with a non-interlaced signal or the converted non-interlaced signal with an interlaced signal on an overlay window of a non-interlaced display or an interlaced display, respectively through out. One would be motivated to do so because this would allow less expensive monitors and allow users to view multiple sources at the same time.



Frederick teaches a display apparatus coupled to a video controller of the host computer system (Figure 6: A/V display 12), the display apparatus comprising circuitry allowing an interlaced mode of operation (column 5, lines 3 – 5: the display 12 may function as a stand-alone TV, including the capability to display standard interlaced TV video) and a noninterlaced mode of operation (column 5, lines 36 and 37: the PC 14 and display 12 support at least 480 active lines per frame of progressively scanned video) (column 15, lines 14 and 15: the PC Theatre display 12 and PC 14 support two modes of operation: TV and PC; column 15, lines 57 and 58: digital TV support is recommended by both the PC Theatre PC 14 and display 12; column 16, lines 12 – 23: PIP functionality and composite video; column 19, lines 14 – 31: display 12 support two modes of operations: stand-alone mode and slave mode. In the stand-alone mode, the display 12 operates as a standard TV. In the slave-mode, the display 12 displays the VGA video from the PC 14; column 5, lines 33 – 35: PC 14 and display 12 support two different viewing modes: one configured for the display of PC graphics, and other configured for the display of TV video), the display apparatus comprising

a screen (it is inherent that Frederick has a screen because it is inherent that a display apparatus has a screen), said screen operable to display noninterlaced signals (column 21, lines 37 – 39: sending an Input Source Select command to switch the display to the P&D input, wherein this enables the PC to drive the video input of the display) including visually detectable output from the host computer system (column 5, lines 33 – 35: PC 14 and display 12 supports two different viewing modes: one configured for the display of PC graphics, and the other configured for the display of TV video; Figure 6: Digital Graphic Display 46 and Analog Graphic Display 48 from the Host Computer 14) when operating in the noninterlaced mode of

operation (column 21, lines: 25 – 56) and operable to display a television compatible signal when operating in the interlaced mode of operation (column 5, lines 33 – 35: PC 14 and display 12 supports two different viewing modes: one configured for the display of PC graphics, and the other configured for the display of TV video; Figure 6: Digital Graphic Display 46 and Analog Graphic Display 48 from the Host Computer 14),

a communication channel between said host computer system and said display apparatus (Figure 6: User Input USB (42) from the A/V Display 12 to Host Computer 14 and Commands (USB) 44 from Host Computer 14 to A/V Display 12), the communication channel for transmitting commands and information to and from said host computer system and to and from said display apparatus (Figure 6: 42 and 44),

a microprocessor (column 18, lines 46 and 47 and Figure 8: the display electronics 80 represents the functionality of a standard VGA monitor; column 6, lines 47 – 50 and Figure 8: the control electronics 82 is coupled to the display electronics 80 by an I<sup>2</sup>C bus 84, and it represents the display microcontroller communication and control functionality) for receiving commands from said host computer system (column 5, lines 46 – 49: the PC 14 and display 12 support the USB monitor Control Class Specification and VESA Monitor Control Command Set (MCCS) Standard for software control of the display by the PC; Figure 8: the display electronics 80 is coupled to P and D 32/34 which is in communication with the Host Computer 12; column 5, lines 31 and 32 and column 6, lines 61 and 62: the PC 14 drives the display 12 with a standard RGB or TMDS video signal, where RGB is analog video and TMDS is digital video), when the display apparatus is in the interlaced mode of operation and when the display apparatus is in the noninterlaced mode of operation (column 5, lines 31 and 32: the PC 14 drives the display 12 with

a standard RGB or TMDS video signal). Frederick did not expressly disclose the microprocessor comprising control logic for switching said display apparatus between said interlaced and noninterlaced modes of operation in response to at least one of said commands, though Frederick does disclose the PC 14 and display 12 support two different viewing modes: one configured for the display of PC graphics and the other configured for the display of TV video (column 5, lines 33 – 35). Iwaki discloses a MUX 106 that selects between graphics data that is interlaced and converted non-interlace inputs (column 4, lines 25 - 31 and Figure 1). It would have been obvious for one of ordinary skill in the art at the time of the invention to modify Frederick's system to have a multiplexer that receives a command to switch between interlace and non-interlace modes instead of using two switches. One would be motivated to do so because this allows smaller circuitry, which potentially saves space, and allows users to view correctly displayed signals that are either interlaced or noninterlaced signals.

The combination of Frederick and Roskowski's system teaches a connector coupled to a video capture circuitry as the A/D converter and the circuitry 19, taught by Roskowski, is combined into Frederick's system and the A/D converter 15 and circuitry 19 has inputs and outputs (Roskowski, Figure 2) and Frederick teaches the host computer 12 is coupled to the PC 14 (Frederick, Figure 8).

Regarding independent claim 1, claim 1 is similar in scope as to claim 13, thus the rejection for claim 13 hereinabove is applicable to claim 1.

Regarding dependent claim 2, Frederick teaches interlaced mode of operation supports at least one of a National Television System Committee (NTSC) input, a Phase Alteration by Line (PAL) input, and a Sequential a Memoire (SECAM) input (column 15, line 57 – column 16, line 11).

Regarding dependent claim 3, Frederick teaches noninterlaced mode of operation supports at least one of a computer graphics mode input, VGA input and SVGA input (column 19, lines 23 – 32: displays VGA video from the PC 14).

Regarding dependent claim 4, Frederick teaches the microprocessor receives at least one command from said host computer system, the command suitable for controlling a television function of the display apparatus from the host computer system (column 13, line 66 – column 14, line 26: the user controls the ability to receive commands specified in Table 10 and that the controls listed in Table 10 is supported by the PC 14 and the display respond to the control either internally or send a control command to the display) when said display apparatus is operating in the interlaced mode of operation (column 13, lines 43 – 65: the user input from the display's front button panel and remote control is passed back to the PC 14 for the functionalities in Table 10), wherein the television function includes at least one of changing a channel, volume adjustment and picture adjustment (column 14, lines 10 – 27: Table 10).

Regarding dependent claim 5, Frederick teaches the microprocessor receives at least one command from said host computer system, the command suitable for controlling a television

function of the display apparatus from the host computer system (column 13, line 66 – column 14, line 26: the user controls the ability to receive commands specified in Table 10 and that the controls listed in Table 10 is supported by the PC 14 and the display respond to the control either internally or send a control command to the display) when said display apparatus is operating in the interlaced mode of operation (column 13, lines 43 – 65: the user input from the display's front button panel and remote control is passed back to the PC 14 for the functionalities in Table 10; column 11, lines 34 and 35: only appropriate user controls that are supported by the display are presented to the user), wherein the television function includes at least one of selecting a video source, brightness, contrast, vertical and horizontal sizing and positioning, on/off (rest/resume), refresh rate, resolution and color temperatures (column 12, lines 1 – 18: Table 7; column 12, lines 30 – 65: Table 8; column 14, lines 10 – 27: Table 10).

Regarding dependent claim 6, Frederick teaches the television function of the display apparatus is controlled from the host computer system while the display apparatus is in an interlaced mode of operation (column 13, line 66 – column 14, line 26: the user controls the ability to receive commands specified in Table 10 and that the controls listed in Table 10 is supported by the PC 14; column 5, lines 3 – 5: the display 12 may function as a stand-alone TV, including the capability to display standard interlaced TV video).

Regarding dependent claim 7, Frederick teaches the display apparatus is switched to said interlaced mode of operation, a video signal from a video controller in noninterlaced mode is not

displayed by said display apparatus (column 5, lines 3 – 5: the display 12 may function as a stand-alone TV, including the capability to display standard interlaced TV video).

Regarding dependent claim 8, Frederick teaches the interlaced mode of operation supports Sequential a Memoire (SECAM) input (column 15, line 57 – column 16, line 11).

Regarding dependent claim 9, Frederick teaches the command is a display mode change command (column 12, lines 30 – 64: Table 8; column 13, lines 3 – 28: Table 9: TV Mode, Stand Alone Mode).

Regarding dependent claim 10, Frederick teaches the command is sent over a serial port (column 10, lines 6 – 23: USB).

Regarding dependent claims 15 and 16 and independent claim 29 and 34, claims 15, 16, 29 and 34 are similar in scope as to claims 4 and 5, thus the rejections for claims 4 and 5 hereinabove are applicable to claims 15, 16, 29, and 34.

Regarding dependent claims 14, 17, 23, 24, 25, 28, 30, 32, 33, 35, 36, and 37, claims 14, 17, 23, 24, 25, 30, 32, 35, and 36 are similar in scope as to claims 2, 3, 6, 9, 10, and 12, thus the rejections for claims 2, 3, 6, 9, 10, and 12 hereinabove is applicable to claims 14, 17, 23, 24, 25, 28, 30, 32, 33, 35, 36, and 37.

Regarding dependent claim 18, Frederick teaches in response to the display apparatus being switched to said interlaced mode of operation, a video signal from said video controller in noninterlaced mode is not displayed by said display apparatus (column 5, lines 3 – 5: the display 12 may function as a stand-alone TV, including the capability to display standard interlaced TV video, where only interlaced TV video signal is displayed when functioning as a stand-alone TV).

Regarding dependent claim 19, Frederick teaches the video controller receives a signal from the display apparatus (Figure 6: Baseband video input (Composite) 52 from the A/V Display 12 to Host Computer 14).

Regarding dependent claim 20, Frederick teaches the signal from the display apparatus is a video signal (Figure 6: Baseband video input (Composite) 52 from the A/V Display 12 to Host Computer 14).

Regarding dependent claim 21, Frederick teaches the video signal is a composite signal (Figure 6: Baseband video input (Composite) 52 from the A/V Display 12 to Host Computer 14).

Regarding dependent claim 22, Frederick teaches the video signal is an S-video signal (column 6, line 57 – column 7, line 15: Table 1: A S-video connector may be substituted if an adapter for composite video support is supplied with the product).

Regarding dependent claims 27, Frederick teaches disclose the command is sent over a data port (column 9, line 66 – column 5: DDC2B support is used in both the PC 14 and display 12; column 10, lines 6 – 23: USB is a bidirectional serial bus).

Regarding dependent claims 46, 49, and 51, Frederick teaches the screen and the microprocessor of the display apparatus are both configured within a display housing of the display apparatus (Figure 8: monitor 12 contains a screen (inherent) and a display electronics 80 and control electronics 82).

Regarding dependent claims 47, 48, and 50, The combination of Frederick and Roskowski's system teaches a second connector coupled to a video capture circuitry as the A/D converter and circuit 19, taught by Roskowski, is combined into Frederick's system and the A/D converter 15 and circuit 19 has inputs and outputs (Roskowski, Figure 2) and Frederick teaches the host computer 12 is coupled to the PC 14 (Frederick, Figure 8). The combination of Frederick's, Roskowski's, and Ersoz's systems teaches the second connector is configured to send the television compatible signal from the display apparatus to the video capture circuitry in the noninterlaced mode (Frederick, column 19, lines 25 – 28: when connected to a PC Theatre PC 14 and in slave-mode, the video from the tuner 124 or A/V connectors may be selected and sent to the PC 14 via the control electronics 82 for processing; Roskowski, column 6, lines 9 – 16 and Figure 2: a circuit 19 that translates interlaced video data into non-interlaced data and non-interlaced computer graphics data into interlaced data for presentation on output display monitors capable for displaying either interlaced data or non-interlaced data). The rationale of the parent



claims is incorporated herein. The combination of Frederick's, Roskowski's, and Ersoz's systems teaches the third connector coupled to the video capture circuitry and configured to receive the noninterlaced television output from the video capture circuitry (Roskowski, Figure 2: output line of circuit 19).

Regarding dependent claims 12, 28, 33, and 37, Frederick did not expressly disclose the overlay window is enabled as at least one of a picture-in-picture (PIP) and a picture-on-picture (POP), however Frederick does disclose PIP functionality (column 16, lines 12 – 23). Ersoz discloses PIP (Figure 1(f)), which reads on the claimed overlay window is enabled as at least one of a picture-in-picture (PIP) and a picture-on-picture (POP). It would have been obvious for one of ordinary skill in the art at the time of the invention to modify Frederick's system to include PIP and POP. One would be motivated to do so because this provides picture-in-picture options and the viewing of multiple desired data.

Regarding dependent claims 52, 53, and 55, Frederick teaches the display apparatus is configured to receive signals from the host computer for controlling the screen when operating in the interlaced mode of operation (column 19, lines 28 – 32: in slave mode, the display 12 passes all user input to the PC 14, for processing and responds to USB commands from the PC 14).

Regarding dependent claim 54, Frederick teaches sending signals from the computer system to control the display apparatus when operating in the interlaced mode of operation

(column 19, lines 28 – 32: in slave mode, the display 12 passes all user input to the PC 14, for processing and responds to USB commands from the PC 14).

Claims 11 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Frederick et al. (US 6,314,479) in view of Roskowski et al. (US 5,257, 348) and Ersoz et al. (US 5,287,189) and Iwaki (US 6,567,097) and Newman et al (US 6,154,600).

Regarding dependent claims 11 and 26, Frederick did not expressly disclose the command is sent over a parallel port. Newman discloses a parallel port (column 7, lines 1 – 24). It would have been obvious to one of ordinary skill in the art at the time of applicants invention to modify Frederick's system to send a display mode command from the display apparatus parallel busses to the display apparatus so display mode commands which are digital, need not be derived from the horizontal and vertical sync signals, which are analog, thus simplifying the transmission and reception of the display mode commands.

Claims 39, 41, 43, and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Frederick et al. (US 6,314,479) in view of Roskowski et al. (US 5,257, 348) and Ersoz et al. (US 5,287,189) and Iwaki (US 6,567,097) and Gough et al. (US 6,072,489).

Regarding dependent claims 39, 41, 43, and 45, Frederick did not expressly disclose the computer system permits the utilization of other computer functions on at least one underlying screen of the overlay window. Gough discloses overlay windows 62 and 70 over a screen 60 in where other computer functions are allowable, such as the desktop (Figures 3a and 3b). It would have been obvious for one of ordinary skill in the art at the time of the invention to modify

Frederick's system to allow computer functions to operate with an overlay window present. One would be motivated to do so because this allows users to multi-task and allow users to utilize the whole screen.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey J. Chow whose telephone number is (571)-272-8078. The examiner can normally be reached on Monday - Friday 10:00AM - 5:00PM (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ulka Chauhan can be reached on (571)-272-7782. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



/Ulka Chauhan/  
Supervisory Patent Examiner, Art Unit 2628